

DETAILED ACTION

Claim Rejections - 35 USC § 102/103

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6 and 7 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over U.S. 6,359,071 (Watanabe et al).

Watanabe et al disclose thermoplastic elastomer compositions dynamically vulcanized to a gelation rate of 50% to 95% comprising a nylon resin continuous phase and an elastomer dispersed phase including a halide of isobutylene-p-methylstyrene copolymer (X-IPMS), which is not precluded from the present claims, in combination with another rubber component, e.g., hydrogenated NBR. See HNBR-containing examples. The X-IPMS constitutes at least 30% by weight of the total amount of the rubber component (column 5, lines 51-54).

The examples provided by the reference meet the requirements of the present claims in terms of the types of materials added and their contents. The compositions, furthermore, meet the morphology, gel content and production process governing applicants' compositions. The

onus is shifted to applicants to establish that the product of the present claims is not the same as or obvious from that set forth by the reference.

Claim Rejections - 35 USC § 103

4. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. 6,359,071 (Watanabe et al) described hereinabove.

The reference clearly teaches and suggests that the additional rubbers can be functionalized with carboxyl, epoxy and halogen groups (column 5, lines 10, 16, 21, etc.). Accordingly, it would have been obvious to one having ordinary skill in the art to have employed a hydrogenated NBR rubber having a functional group as presently claimed with the reasonable expectation of success. Absent evidence of unusual or unexpected results, no patentability can be seen in the presently claimed subject matter.

Response to Amendment

5. Applicants' amendments and arguments filed April 25, 2008 have effectively overcome the previous art rejections based on European 0506465, Abraham et al and the obviousness-type double patenting rejection over copending Application No. 11/631,293.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ana L. Woodward whose telephone number is (571) 272-1082. The examiner can normally be reached on Monday-Friday (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James J. Seidleck can be reached on (571) 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ana L. Woodward/
Primary Examiner
Art Unit 1796